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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 2

Complete if Known	
Application Number	10/822594-Conf. #2867
Filing Date	April 12, 2004
First Named Inventor	Torbjörn Gärdenfors
Art Unit	2635
Examiner Name	B. A. Zimmerman
Attorney Docket Number	34650-00179USC3

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
BZ	A1	US-2002/0094037	07-18-2002	Darabi et al.
	A2	US-5,937,341	08-10-1999	Suominen
	A3	US-6,427,068	07-30-2002	Suominen
	A4	US-6,631,256	10-07-2003	Suominen
	A5	US-2004/0038655	02-26-2004	Suominen
	A6	US-4,944,025	07-24-1990	Gehring et al.
	A7	US-5,003,621	03-26-1991	Gailus
	A8	US-4,653,117	03-24-1987	Heck
	A9	US-5,222,144	06-22-1993	Whikehart
	A10	US-4,852,123	07-25-1989	Bickley et al.
	A11	US-4,464,770	08-07-1984	Maurer et al.
	A12	US-5,640,698	06-17-1997	Shen et al.
	A13	US-5,850,598	12-15-1998	Behrent
BZ	A14	US-6,226,509	05-01-2001	Mole et al.

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T[6]
BZ	B1	-JP A 07-254865	10-03-1995	Toshiba Corp.	Abstract
BZ	B2	-EP 0 742 647 A1	11-13-1996	Matsushita Electric	
BZ	B3	-WO 94/10757	05-11-1994	Data-Radio Engineering & Consulting GmbH	
BZ	B4	-WO 97/08842	03-06-1997	Pacific Communications Sciences, Inc.	
BZ	B5	-WO 98/08300	02-26-1998	Advanced Micro Devices,, Inc.	
BZ	B6	-EP 0 797 292 A1	09-24-1997	Philips Electronics N.V.	
BZ	B7	-EP 1 058 396 A1	12-06-2000	Motorola, Inc.	
BZ	B8	-WO96/17441	[illegible]	Matsushita Electric Industrial Col, Ltd.	Abstract

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
BZ	C1	D.M. BAKKER et al. "Bluetooth End to End", M&T Books, an Imprint of Hungry Mind, Hungry Minds, Inc., ISBN: 0-7645-4887-5, 7 pages	
	C2	DAVID BLANKENBECKLER, "An Introduction to Bluetooth" ThinkBurst Media, Inc. www.wirelessdevnet.com/channels/bluetooth/features/bluetooth.html, pp. 1-7	
	C3	ING. ZDENEK MIKESKA, "Parameters of Bluetooth receiver and transmitter", January 2, 2004, Institute of Electrical Engineering and Communication, Brno University of Technology, Czech Republic, pp. 1-9	
BZ	C4	HOOMAN DARABI et al., "A 2.4-GHz CMOS Transceiver for Bluetooth", IEEE Journal of Solid-State Circuits, Vol. 36, No. 12, December 2001	

Examiner Signature	B. Zimmerman	Date Considered	8/29/05

Substitute for form 1449/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/822594-Conf. #2867
				Filing Date	April 12, 2004
				First Named Inventor	Torbjörn Gärdenfors
(Use as many sheets as necessary)				Art Unit	2635
				Examiner Name	B. A. Zimmerman
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	C5	BROADCOM "BCM2002X 2.4GHz Bluetooth Frac-N-Radio" Product Brief	
	C6	PIETRO ANDREANI et al. "A CMOS gm-C IF Filter for Bluetooth", In Proceedings of CICC 2000, paper 18-6, May 2000, 4 pages	
	C7	JAN CROLS et al., "A Single-Chip 900 MHz CMOS Receiver Front-End with a High Performance Low-IF Topology", IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, Katholieke Universiteit Leuven, Heverlee, Belgium	
	C8	ASAD A. ABIDI, "Direct-Conversion Radio Transceivers for Digital Communiations," IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, Katholieke Universiteit Leuven, Heverlee, Belgium, pp. 1390-1411	
	C9	M. STEYAERT, "A 1-GHz Single-Chip Quadrature Modulator", IEEE Journal of Solid-State Circuits, Vol. 27, No. 8, August 1992, pps. 1194-1197	
	C10	JACK P.F. GLAS, "Digital I/Q Imbalance Compensation in a Low-IF Receiver" IEEE Globecom, pp 1461-1466, Nov. 1998	
	C11	VITO BOCCUZZI et al., "Testing the Double Low-IF Receiver Architecture" Proceedings of the CICC, IEEE, 1997, pp. 521-524	
	C12	VALKAMA et al., "BSS Based I/Q Imbalance Compensation in Communication Receivers in the Presence of Symbol Timing Errors", Proc. Second Int. Workshop Independent Component Analysis Blind Signal Separation, Helsinki, Finland, June 2000, pp. 393-398.	
	C13	J. SEVENHANS et al., "An Analog Radio Front-end Chip Set for a 1.9 GHz Mobile Radio Telephone Application" 1994 IEEE International Solid-State Circuits Conference, February 16, 1994	
	C14	J.O. VOORMAN "Continuous-time analog integrated filters" Integrated Continuous-Time Filters, New York IEEE Press, 1993	
	C15	JAN CROLS et al., "An Analog Integrated Polyphase Filter for a High Performance Low-IF Receiver", 1995 Symposium on VLSI Circuits Digest of Technical Papers, Katholieke Universiteit Leuven, Heverlee, Belgium	
	C16	M.J. GINGELL, "Single Sideband Modulation using Sequence Asymmetric Polyphase Networks" Electrical Communication - Volume 48, Number 1 and 2 - 1973	
	C17	STEPHEN A. JANTZI, "A Fourth-Order Bandpass Sigma-Delta Modulator", IEEE Journal of Solid-State Circuits, Vol. 28, No. 3, March 1993	
	C18	JAN CROLS et al., "A 1.5 GHz Highly Linear CMOS Downconversion Mixer" IEEE Journal of Solid-State Circuits, Vol 30, No 7, July 1995	
	C19	FLOYD M. GARDNER, Chapter 8 "Phaselock Receivers and Transponders," "Phaselock Techniques" ISBN: 0-471-04294-3, April 1979	
	C20	TRUDY D. STETZLER ET AL., "A 2.7-4.5 V Single Chip GSM Transceiver RF Integrated Circuit, IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995	

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT DOCUMENTS

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BZ	A1	US-4,888,557	12-19-1989	Puckette, IV et al.
	A2	US-5,241,702	08-31-1993	Dent
	A3	US-5,802,463	09-01-1998	Zuckerman
	A4	US-5,828,955	10-27-1998	Lipowski et al.
	A5	US-5,875,212	02-23-1999	Fleek et al.
	A6	US-5,339,463	08-16-1994	Hansen
	A7	US-5,369,470	11-29-1994	Hansen
	A8	US-5,715,529	02-03-1998	Kianush et al.
	A9	US-5,404,589	04-04-1995	Bijker et al.
	A10	US-5,561,689	10-01-1996	Fleek et al.
	A11	US-5,838,730	11-17-1998	Cripps
	A12	US-5,751,188	05-12-1998	Guegnaud et al.
	A13	US-5,649,288	07-15-1997	De Loe, Jr., et al.
	A14	US-5,367,539	11-22-1994	Copley
	A15	US-5,734,976	03-31-1998	Bartschi et al.
	A16	US-5,694,417	12-02-1997	Andren et al.
	A17	US-5,194,829	03-16-1993	Schoffel
	A18	US-5,584,068	12-10-1996	Mohindra
	A19	US-5,890,055	03-30-1999	Chu et al.
	A20	US-5,781,847	07-14-1998	Clarke et al.
	A21	US-5,898,375	04-20-1999	Dent et al.
	A22	US-5,757,531	05-26-1998	Tomesen et al.
	A23	US-5,491,457	02-13-1996	Feher
	A24	US-5,802,117	09-01-1998	Ghosh
	A25	US-5,808,569	09-15-1998	Wuppermann et al.
	A26	US-5,809,016	09-15-1998	Elliott et al.
	A27	US-5,809,096	09-15-1998	Martinez et al.
	A28	US-5,822,378	10-13-1998	Van Veldhuizen
	A29	US-5,848,107	12-08-1998	Philips
	A30	US-5,710,993	01-20-1998	Brekelmans
	A31	US-5,272,534	12-21-1993	Vromans et al.
	A32	US-5,751,249	05-12-1998	Baltus et al.
	A33	US-5,761,613	06-02-1998	Saunders et al.
	A34	US-5,784,414	07-21-1998	Bruekers et al.
	A35	US-5,796,730	08-18-1998	Bellec
	A36	US-5,799,042	08-25-1998	Xiao
	A37	US-5,854,973	12-29-1998	Holtvoeth
	A38	US-5,548,831	08-20-1996	Bijker et al.
	A39	US-5,241,561	08-31-1993	Barnard
	A40	US-5,438,692	08-01-1995	Mohindra
	A41	US-5,604,927	02-18-1997	Moore
	A42	US-5,619,491	04-08-1997	Panzer
	A43	US-5,548,582	08-20-1996	Brajal et al.
	A44	US-5,155,862	10-13-1992	Hansen
	A45	US-4,470,071	09-04-1984	Rindal
	A46	US-4,896,374	01-23-1990	Waugh et al.
BZ	A47	US-5,033,110	07-16-1991	Harman

Examiner Signature	BRIAN ZIMMERMAN PRIMARY EXAMINER	Date Considered	9/1/05

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Art Unit	2635
Examiner Name	B. A. Zimmerman
Attorney Docket Number	34650-00179USC3

	A48	US-5,079,526	01-07-1992	Heck	
	A49	US-5,162,723	11-10-1992	Marzalek et al.	
	A50	US-5,307,517	04-26-1994	Rich	
	A51	US-5,313,173	05-17-1994	Lample	
	A52	US-5,410,733	04-25-1995	Niva et al.	
	A53	US-5,471,665	11-28-1995	Pace et al.	
	A54	US-5,550,865	08-27-1996	Cripps	
	A55	US-5,673,323	09-30-1997	Schotz et al.	
	A56	US-5,715,281	02-03-1998	Bly, deceased, et al.	
	A57	US-5,724,653	03-03-1998	Baker et al.	
	A58	US-5,832,043	11-03-1998	Eory	
	A59	US-5,867,535	02-02-1999	Phillips et al.	
	A60	US-6,006,081	12-21-1999	Moore	
	A61	US-6,374,094	04-16-2002	Zappala	
	A62	US-4,523,324	06-11-1985	Marshall	
	A63	US-4,718,113	01-05-1988	Rother	
	A64	US-5,126,682	06-30-1992	Weinberg	
	A65	US-5,251,218	10-05-1993	Stone et al.	
	A66	US-5,263,194	11-16-1993	Ragan	
	A67	US-5,828,705	10-27-1998	Kroeger et al.	
	A68	US-5,999,802	12-07-1999	Aschwanden	
	A69	US-6,028,885	02-22-2000	Minarik et al.	
	A70	US-6,035,186	03-07-2000	Moore	
	A71	US-6,374,093	04-16-2002	Pesola	
	A72	US-6,560,447	05-06-2003	Rahman et al.	
	A73	US-6,597,748	07-22-2003	Hietala et al.	
	A74	US-5,550,596	11-24-1995	Stroile	
	A75	US-5,710,998	01-20-1998	Opas	
	A76	US-5,963,273	12-10-1996	Bole	
	A77	US-5,282,228	12-09-1991	Scott	
	A78	US-4,476,585	01-25-1982	Reed	
	A79	US-5,517,530	06-26-1995	Gardner	
	A80	US-4,817,198	12-09-1985	Rinderle	
	A81	US-6,633,550	10-14-2003	Gardenfors et al.	
	A82	US-6,477,148	11-05-2002	Gardenfors et al.	
	A83	US-5,926,513	10-14-2003	Suominen	
	A84	US-4,551,688	11-05-1985	Craiglow	
	A85	US-4,893,316	01-09-1990	Janc et al.	
	A86	US-4,972,455	11-20-1990	Phillips et al.	
	A87	US-5,020,092	05-28-1991	Phillips et al.	
	A88	US-5,052,027	09-24-1991	Poklemba et al.	
	A89	US-5,396,520	03-07-1995	Degges	
	A90	US-5,537,435	07-16-1996	Carney et al.	
	A91	US-5,619,536	04-08-1997	Gourgue	
	A92	US-5,640,416	06-17-1997	Chalmers	
	A93	US-5,661,487	08-26-1997	Targoff	
	A94	US-4,653,117	03-24-1987	Heck	
	A95	US-4,852,123	07-25-1989	Bickley et al.	
	A96	US-5,222,144	06-22-1993	Whitehart	
	A97	US-4,633,315	01-21-1981	Kasperkovitz	
	A98	US-4,569,065	02-04-1986	Nolde et al.	

Examiner Signature	BRIAN ZIMMERMAN PRIMARY EXAMINER	Date Considered	9/1/05

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BZ	A99	US-4,523,328	06-11-1985	Kasperkovitz	
	A100	US-4,426,735	01-17-1984	Kasperkovitz	
	A101	US-5,901,349	05-04-1999	Guegnaud et al.	
	A102	US-5,521,548	05-28-1996	Sugawara	
	A103	US-5,430,770	07-04-1995	Abbey	
	A104	US-5,440,587	08-08-1995	Ishikawa et al.	
	A105	US-5,212,825	05-18-1993	Layton	
	A106	US-5,134,404	07-28-1992	Peterson	
	A107	US-4,776,039	10-04-1988	Akaiwa	
	A108	US-4,633,315	12-30-1986	Kasperkovitz	
	A109	US-4,837,853	06-06-1989	Heck	
	A110	US-4,926,443	05-15-1990	Reich	
	A111	US-6,633,979	10-14-2003	Smeets	
BZ	A112	US-2002/0090924	07-11-2002	Suominen	

FOREIGN PATENT DOCUMENTS

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	B1	WO-02/35718 A2	05-02-2002	Sayers et al.	
	B2	EP-1 249 076 B1	02-18-2004	Sayers et al.	
BZ	B3	EP-0 470 481 B1	10-30-1996	Wignot et al.	
	B4	EP-0 472 119 B1	12-20-1995	Wignot et al.	
	B5	EP-0 512 374 B1	08-28-1996	Kim	
	B6	EP-0 470 484 B1	09-25-1996	Wignot et al.	
	B7	EP-1058399	12-06-2000	Naoki et al.	
	B8	GB-2295513	05-29-1996	Forster	
	B9	EP-0855804	07-29-1998	Suominen	
	B10	WO-95 10889	04-20-1995	Dent	
	B11	WO-96 28946	09-19-1996	Carney et al.	
	B12	EP-0 598 227 A1	05-25-1994	Kluge et al.	
	B13	GB-2052198	01-21-1981	Richardson	
	B14	CA-1,304,786	07-07-1992	Janc et al.	
	B15	CA-1,318,358	05-25-1993	Janc et al.	
BZ	B16	WO-98 11672	03-19-1998	Suominen	

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BZ	C1	ERICSSON, Ericsson Technology Licensing – Bluetooth, pp. 1-5; www.ericsson.com/bluetooth <http://www.ericsson.com/bluetooth>; July 23, 2004	
	C2	GENTILE, KEN, Fundamentals of Digital Quadrature Modulation; "RF Mixed Signals", pp. 1-5; www.rfdesign.com <http://www.rfdesign.com>; February 2003	
BZ	C3	Wireless, RF, and Cable; Application Note 686, pp. 1-7; www.maxim-ic.com	

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		<http://www.maxim-ic.com>; October 13, 2000	
	C4	STEBER, J. M., "PSK Demodulation" (Part 1); WJ Tech-note; Vol. 11, No. 2, pp. 1-6; WJ Communications, Inc.; San Jose, CA; March 1984	
	C5	FAGUE, D. E. et al., "Performance Evaluation of a Low Cost, Solid State Radio Front End for DECT"; IEEE; pp. 512-515; 1994	
	C6	MIN, J., "Analysis & Design of a Frequency-Hopped Spread-Spectrum Transceiver for Wireless Personal Communications"; UCLA Electrical Engineering Dept.; Los Angeles, CA; pp. 1-158; January, 1996	
	C7	STEYAERT, M. et al., "Analog Polyphase Filters in Highly Integrated Receivers", AACD; Heverlee, Belgium; pp. 364-369; March 30, 1994	
	C8	STEYAERT, M. et al., "Analog Integrated Polyphase Filters"; Analog Circuit Design,; Eindhoven, Netherlands; pp. 149-166; 1995	
	C9	DEFRANCE, J. J., Communications Electronics Circuits; Holt Rinehart & Winston, New York, NY; pp. 262-265; 1966	
	C10	ROBERTS, R.S., Television Engineering; Pentech Press, London, England; pp. 45-47; 1985	
	C11	BALTUS, P. et al., "DECT Zero IF Receiver Front End"; Analog Circuit Design; Kluwer Academic Publishers; pp. 295-318; Netherlands; 1994	
	C12	RABAEY, D. et al., "The Challenges for Analog Circuit Design in Mobile Radio VLSI Chips"; Analog Circuit Design; Kluwer Academic Publishers, Netherlands; pp. 225-236; 1994	
	C13	SEVENHANS, J. et al., "An Integrated Si Biopolar RF Transceiver for a Zero IF 900 MHz GSM Digital Mobile Radio Frontend of a Hand Portable Phone"; 1991 IEEE Custom Integrated Cuicuits Conference; pp. 7.7.1 - 7.7.4; 1991	
	C14	OKANOBU, T. et al., "Advanced Low Voltage Single Chip Radio IC"; IEEE Transactions on Consumer Electronics; Vol. 38 No. 3; pp. 465-475; August 1992	
	C15	CROLS, J. et al., "A Fully Integrated 900 MHz CMOS Double Quadrature Downconverter"; 1995 IEEE International Solid-State Conference; pp. 136-137; February 1995	
	C16	MIN, J., LIU et al., "A Low-Power Correlation Detector for Binary FSK Direct-Conversion Receivers"; UCLA, Los Angeles, CA; June 22, 1995	
	C17	CHAN, P.Y. et al., "A Highly Linear 1-GHz CMOS Downconversion Mixer"; European Solid State Circuits Conference; Seville, Spain; pp. 210-213, slides p. 1-25; September 22, 1993	
	C18	ABIDI, A. A., "Radio-Frequency Integrated Circuits for Portable Communications"; Custom IC Conference, San Diego, CA; pp. 151-158; May 1994	
	C19	ROFOUGARAN, A. et al., "A 1 GHz CMOS RF Front-End IC with Wide Dynamic Range"; European Solid State Circuits Conference, Lille, France, p. 250-253, slides p. 1-23; September 1995	
	C20	ROFOUGARAN, A. et al., "A 900 MHz CMOS LC-Oscillator with Quadrature Outputs"; International Solid-State Circuits Conference, p. 1-10; 1996	
	C21	BURT, A., "Direct Conversion Receivers Come of Age in the Paging World"; GEC Review, Vol. 7 No. 3, p. 156-160; 1992	
	C22	ABIDI, A. A., "Low-Power Radio-Frequency IC's for Portable Communications"; Proceedings of IEEE, Vol. 83 No. 4, p. 544-569; April 1995	
	C23	ABIDI, A. A., "Noise in Active Resonators and the Available Dynamic Range"; IEEE Transactions on Circuits and Systems, Vol. 39 No. 4, p. 296-299; April 1992	
	C24	TUCKER, D. G., "The History of the Homodyne and Synchrodyne"; Journal of the British Institution of Radio Engineers, p. 143-154; January 4, 1954	
	C25	VANCE, I. A. W., "Fully Integrated Radio Paging Receiver"; IEE Proc.; Vol. 129, No. 1; pp. 2-6; February 1982	
	C26	YAMASAKI, K. et al., "Credit Card Size Numeric Display Pager with Micro-Strip Antenna for 900 MHz Band"; NEC Res. & Develop., Vol. 34, No. 1; pp. 84-95; January 1993	
	C27	TANAKA, S. et al., "High-Frequency, Low-Voltage Circuit Technology for VHF Paging Receiver"; IEICE Trans. Fundamentals; Vol. E76-A, No. 2; pp. 156-163; February 1993	
	C28	YAMASAKI, K. et al., "Compact Size Numeric Display Pager with new Receiving System";	

Examiner Signature	BRIAN ZIMMERMAN PRIMARY EXAMINER	Date Considered	9/2/05

DALLAS2 1104515v1 34650-00179USC3

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Application Number	10/822594-Conf. #2867
Filing Date	April 12, 2004
First Named Inventor	Torbjörn Gärdenfors
Art Unit	2635
Examiner Name	B. A. Zimmerman
Attorney Docket Number	34650-00179USC3

no copies

		NEC Res. & Develop., Vol. 33, No. 1; pp. 73-81; January 1992
BZ	C29	MARSHALL, C. et al., "A 2.7V GSM Transceiver ICs with On-Chip Filtering"; Paper TA 8.7, IEEE ISSCC; pp. 148-149; February 16, 1995
	C30	LIN, Y.-M., KIM, B., & GRAY, P. R., A 13-b 2.5-MHz Self-Calibrated Pipelined A/D Converter in 3 µm CMOS; IEEE Journal of Solid-State Circuits; Vol. 26, No. 4; pp. 628-636; April 1991
	C31	LEESON, D.B., "A Simple Model of Feedback Oscillator Noise Spectrum"; IEEE Proceedings Letters; pp. 329-220; February 1966
	C32	CHANG, H. Y.-C., ABIDI, A.A. & GAITAN,. M., Large-Suspended Inductors on Silicon and Their Use in a 2-µm CMOS RF Amplifier; IEEE Electronic Device Letters; Vol. 14, No. 5; pp. 246-248; May 1993
	C33	ENAM, S. K. et al., "NMOS IC's for Clock and Data Regeneration in Gigabit-per-Second Optical-Fiber Receivers"; IEEE Journal of Solid-State Circuits; Vol. 27, No. 12; pp. 1763-1774; December 1992
	C34	BUCHWALD, A.W. et al., "High Speed Voltage-Controlled Oscillator with Quadrature Outputs"; pp. 1-2; December 19, 1990
	C35	THOMAS, V. et al., "A One-Chip 2GHz Single Superhet Receiver for 2Mb/s FSK Radio Communication"; Paper WP 2.7; Digest of Technical Papers; IEEE ISSCC; pp. 42-43; February 16, 1994
	C36	VEIT, W. et al., "A 2.7V 800 MHz-2.1GHz Transceiver Chipset for Mobile Radio Applications in 25GHz ft Si-Bipolar"; 1994 Bi-Polar/BiCMOS Circuits & Technology Meeting 11.2; pp. 175-178; 1994
	C37	NEGUS, K. et al., "Highly-Integrated Transmitter RFIC with Monolithic Narrowband Tuning for Digital Cellular Handsets"; Paper WP 2.5; IEEE ISSCC, Digest of Technical Papers; pp. 38-39; February 16, 1994
	C38	TAKAHASHI, C. et al., "A 1.9GHz Si Direct Conversion Receiver IC for QPSK Modulation Systems"; IEEE ISSCC, Paper TA 8.2, Digest of Technical Papers; pp. 138-139; February 16, 1995
	C39	LIU, H-C. et al., "A Low-Power Baseband Receiver IC for Frequency-Hopped Spread Spectrum Applications"; IEEE Custom Integrated Circuits Conference; pp. 311-314; 1995
	C40	THAMSIRIANUNT, M. et al., "CMOS VCOs for PLL Frequency Synthesis in GHz Digital Mobile Radio Communications"; IEEE Custom Integrated Circuits Conference; pp. 331-334; 1995
	C41	MONIZ, J.M. et al., "Improving the Dynamic Range of Si MMIC Gilbert Cell Mixers for Homodyne Receivers"; IEEE 1994 Microwave and Millimeter-Wave Monolithic Circuits Symposium; pp. 103-106; 1994
	C42	WEAVER, D, K., JR., "A Third Method of Generation and Detection of Single-Sideband Signals"; Proceedings of the IRE; pp. 1703-1705; December 1956
	C43	KOULLIAS, I. A. et al., "A 900MHz Transceiver Chip Set for Dual-Mode Cellular Radio Mobile Terminals"; IEEE ISSCC; Paper TP 9.2; pp. 140-141; February 25, 1993
	C44	MIN, J. et al., "An All-CMOS Architecture for a Low-Power Frequency-Hopped 900 MHz Spread Spectrum Transceiver"; IEEE 1994 Custom Integrated Circuits Conference; pp. 379-382; 1994
	C45	WILSON, J. F. et al., "A Single-Chip VHF and UHF Receiver for Radio Paging"; IEEE Journal of Solid-State Circuits; Vol. 26, No. 12; pp. 1944-1950; December 1991
	C46	DEENEY, M., "Software Radio - the End of RF Design?"; Teltec Ireland, A Supplement to Technology Ireland; Telecommunications Research & Development; November 1996
	C47	Standard Search Report for RS 99030 dated July 23, 1997 completed July 21, 1997
	C48	BAINES, R., "The DSP Bottleneck"; IEEE Communications Magazine; Vol. 33, No. 5; pp. 46-54; May 1995
BZ	C49	GROSHONG, R. et al., "Undersampling Techniques Simplify Digital Radio", Application Note AN-301, published by Analog Devices, Inc., reprinted from Electronic Design; pp. 3-95-3-101; May 23, 1991

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				Filing Date	April 12, 2004
				First Named Inventor	Torbjörn Gärdenfors
(Use as many sheets as necessary)				Art Unit	2635
				Examiner Name	B. A. Zimmerman
Sheet	6	of	6	Attorney Docket Number	34650-00179USC3

BZ	C50	VAN DOOREMOLEN, W.H.A. et al, "A Complete FM Radio on a Chip"; Integrated Circuits, Application Note AN192; Philips Semiconductors; December 1991	
	C51	KASPERKOVITZ, D., "An Integrated FM Receiver"; Microelectronics Reliability, v. 21(2); pp. 183-189; 1981	
	C52	KASPERKOVITZ, W.G., "FM Receivers for Mono and Stereo on a Single Chip"; Philips Technical Review; V. 41(6); pp. 169-182; 1983/84	
	C53	OLMSTEAD, C. et al., "Digital IF Processing", RF Design; pp. 30-40; September 1994	
	C54	CAVERS, J. et al., "A DSP-Based Alternative To Direct Conversion Receivers For Digital Mobile Communications"; pp. 2024-2029; IEEE, 1990	
	C55	CAVERS, J. et al., "Adaptive Compensation for Imbalance and Offset Losses in Direct Conversion Transceivers"; IEEE Transactions On Vehicular Technology; Vol. 42, No. 4; pp. 581-588; November 1993	
	C56	GRAY et al., "Future Directions in Silicon ICs for RF Personal Communications"; Custom Integrated Circuits Conference; pp. 83-90; 1995	
BZ	C57	PAEZ-BORRALLO, J. et al., "Self Adjusting Digital Image Rejection Receiver for Mobile Communications"; IEEE Vehicular Technology Conference; Vol. 2; pp. 686 -690; March 1997	

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	

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Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	C1	OSCARSSON, F. et al., "Wideband HF Receiver with Digital Quadrature Splitting"; Proceedings on the Fourth International Conference on Signal Processing Applications and Technology; pp. 1267-71, 1993	
	C2	VANWELSENAERS, A., et al., "Alcatel Chip Set for GSM Handportable Terminal"; Proceedings of 5th Nordic Seminar on Digital Mobile Radio Communications DMR V; Helsinki, Finland; pp. 265-271; December 1-3, 1992	

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